

# SCIENCE STUDY GUIDE

Course options and career opportunities

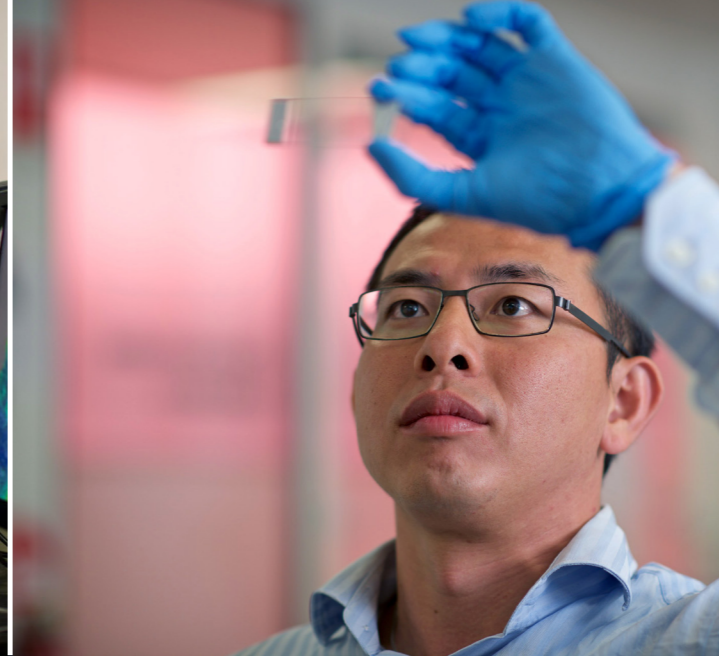
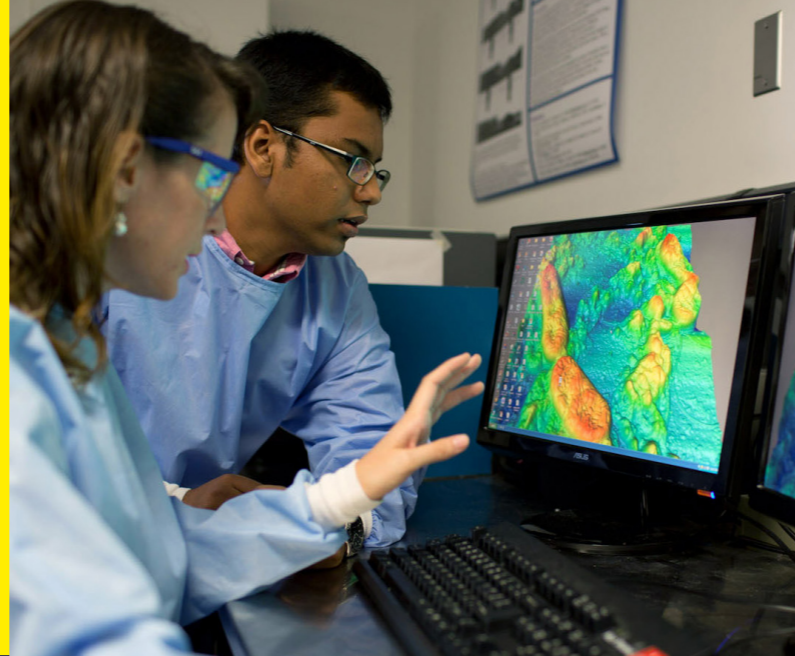
[swinburne.edu.au/science](https://swinburne.edu.au/science)

# WHERE WILL SCIENCE TAKE YOU?

When you study science at Swinburne, you embark on a journey of discovery.

You'll experience practical learning and conduct research in world-class labs. You'll study in a university setting that has strong connections with industry and regularly collaborates with esteemed researchers.

Science equips you with excellent problem-solving skills so you can help make better sense of the world. And it takes you in many exciting career directions.



I want to learn how to use mathematics to model our world

I want to learn about matter and how the universe works

I want to learn about how molecules react and can be manipulated

I want to learn about how molecules make your body work

I want to learn about cells and how to change them

I want to learn about water and agriculture, and how to manage them

## STUDY MATHEMATICS

### WITH A DEGREE

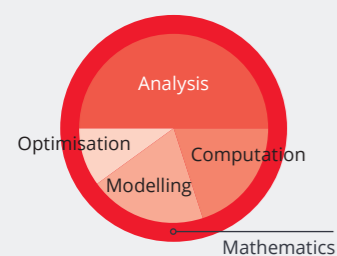
Bachelor of Science (Professional) with a major in Applied Mathematics

Bachelor of Science with a major in Applied Mathematics

Pathway to a degree:

Diploma of Science (UniLink)

### TO LEARN ABOUT



### TO BECOME A

- Mathematical researcher
- Quantitative analyst
- Financial analyst
- Actuary
- Biological and Climate Modeller

## STUDY PHYSICS

### WITH A DEGREE

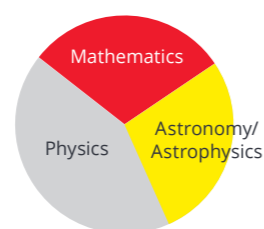
Bachelor of Science (Professional) with a major in Physics

Bachelor of Science with a major in Physics

Pathway to a degree:

Diploma of Science (UniLink)

### TO LEARN ABOUT



### TO BECOME A

- Research and development physicist
- Financial modeller and forecaster
- Medical physicist
- Meteorologist and climate modeller
- Astrophysicist
- Data Analyst

## STUDY CHEMISTRY

### WITH A DEGREE

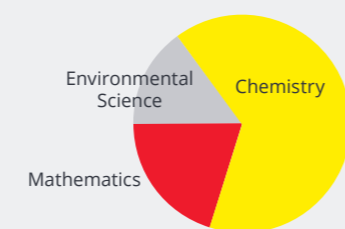
Bachelor of Science (Professional) with a major in Chemistry

Bachelor of Science with a major in Chemistry

Pathway to a degree:

Diploma of Science (UniLink)

### TO LEARN ABOUT



### TO BECOME A

- Chemical researcher
- Analytical forensic scientist
- Agricultural or environmental scientist
- Diagnostic laboratory scientist
- Food or beverage production technician
- Pharmaceutical scientist

### OR A DIPLOMA OR CERTIFICATE

Diploma of Laboratory Technology  
Certificate IV in Laboratory Technology  
Certificate IV in Science

### TO BECOME

- Laboratory technician
- Technical officer

## STUDY BIOCHEMISTRY

### WITH A DEGREE

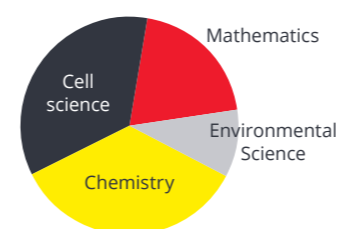
Bachelor of Science (Professional) with a major in Biochemistry

Bachelor of Science with a major in Biochemistry

Pathway to a degree:

Diploma of Science (UniLink)

### TO LEARN ABOUT



### TO BECOME A

- Biochemical researcher
- Clinical biochemist
- Agricultural or environmental scientist
- Forensic scientist
- Food or beverage production technician
- Pathologist

### OR A DIPLOMA OR CERTIFICATE

Diploma of Laboratory Technology  
Certificate IV in Laboratory Technology  
Certificate IV in Science

### TO BECOME

- Laboratory technician
- Technical officer

## STUDY BIOTECHNOLOGY

### WITH A DEGREE

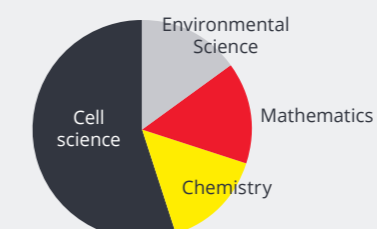
Bachelor of Science (Professional) with a major in Biotechnology

Bachelor of Science with a major in Biotechnology

Pathway to a degree:

Diploma of Science (UniLink)

### TO LEARN ABOUT



### TO BECOME A

- Biotechnology researcher
- Clinical biochemist
- Agricultural or environmental scientist
- Diagnostic laboratory scientist
- Food or beverage production technician
- Pharmaceutical scientist

### OR A DIPLOMA OR CERTIFICATE

Diploma of Laboratory Technology  
Certificate IV in Laboratory Technology  
Certificate IV in Science

### TO BECOME

- Laboratory technician
- Technical officer

## STUDY ENVIRONMENTAL SCIENCE

### WITH A DEGREE

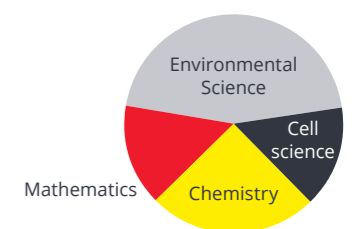
Bachelor of Science (Professional) with a major in Environmental Science

Bachelor of Science with a major in Environmental Science

Pathway to a degree:

Diploma of Science (UniLink)

### TO LEARN ABOUT



### TO BECOME A

- Environmental scientist or consultant
- Sustainability analyst
- Water quality expert
- Plant and animal breeder

### OR A DIPLOMA OR CERTIFICATE

Diploma of Laboratory Technology  
Certificate IV in Laboratory Technology  
Certificate IV in Science

### TO BECOME

- Laboratory technician
- Technical officer

# THE SWINBURNE ADVANTAGE

At Swinburne, getting you job-ready is at the core of what we do. Our Work Integrated Learning options prepare you for the day-to-day requirements of work, helping you become a more competitive graduate. You'll build invaluable skills, career networks and, most importantly, the confidence of knowing you have what it takes to land a job in your field. This is the Swinburne Advantage.

Visit [swinburne.edu.au/workintegratedlearning](https://swinburne.edu.au/workintegratedlearning)

## Professional degrees

Professional degrees are available to students who have completed an Australian Year 12 program. These courses extend the standard degrees to include a professional placement co-major comprising a 12-month work placement. The professional placement co-major is credit-bearing and will strengthen your employability. You'll benefit from Swinburne's unique industry partnerships and be paid during your placement. Look for degrees with (Professional) in the title.

## Double degrees

Double degrees are a great way to broaden your study experience and are highly respected by employers. They combine two areas of study and on completion you'll be awarded two degrees. A double degree is generally only one year longer than a single degree.

Consider combining your IT degree with a degree in another study area by studying:

- Bachelor of Arts/Bachelor of Science
- Bachelor of Education (Secondary)/Bachelor of Science
- Bachelor of Engineering (Honours)/Bachelor of Science
- Bachelor of Health Science/Bachelor of Science
- Bachelor of Laws/Bachelor of Science

## Pathways to a degree

### UNILINK DIPLOMAS

UniLink diplomas are equivalent to eight units of study (typically one year of full-time study) and can provide a pathway to the second year of a related bachelor degree.

These courses are an option for students who miss direct entry to a degree or who would benefit from a more supportive style of learning.

### VOCATIONAL EDUCATION

Diplomas and certificates are vocational qualifications that provide practical teaching and skills for work. A vocational qualification could prepare you for your first job, help you retain or take the first step in a career change.

Successful completion of a vocational qualification may also allow you to progress to another qualification with advanced standing.

## Scholarships

The Vice-Chancellor's Excellence Scholarship is awarded to students in recognition of academic excellence. Recipients will receive \$5000 per annum for the normal duration of their chosen degree, plus a one-off payment of \$2000 towards an international study experience. They will also have the opportunity to join our High Achievers Program.

To learn more about the program visit [swinburne.edu.au/highachievers](https://swinburne.edu.au/highachievers)

Swinburne also offers scholarships to students from indigenous backgrounds, students suffering from financial hardship and students who have relocated from regional areas to study.

For a full list of scholarships, including value and eligibility criteria, visit [swinburne.edu.au/scholarships](https://swinburne.edu.au/scholarships)

